

TRADOC PAMPHLET 715-6



INDEPENDENT
GOVERNMENT
ESTIMATE PREPARATION
GUIDE

19 July 2000

FOREWORD

This pamphlet has been developed to provide a better understanding of the processes involved in preparing an Independent Government Estimate (IGE). As recipients of the taxpayers' money, we have the responsibility to get the most from each dollar allocated. The proper preparation of an IGE is a significant step in garnering public confidence in our ability to handle these precious resources. It is up to you, the customer activity, and recipient of the acquired goods and services, to maintain the trust given to us each time you request a contracting action. The accuracy of your work when preparing an IGE is the key to our success or failure in this endeavor. Read and follow the contents of this pamphlet carefully, and you will be on the right road to ensuring The Army's acquisition decisions are sound.

Your supporting contracting office is there to assist you. Working as a team, we can ensure each contracting dollar is spent both prudently and wisely.

A handwritten signature in black ink, reading "Charles W. Thomas". The signature is written in a cursive, slightly stylized font.

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*TRADOC Pamphlet 715-6

19 July 2000

Procurement
INDEPENDENT GOVERNMENT ESTIMATE PREPARATION
GUIDE

The proponent of this pamphlet is the Deputy Chief of Staff for Base Operations Support (DCSBOS). Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) through channels to Commander, TRADOC, ATTN: ATBO-A, 5 North Gate Road, Fort Monroe, VA 23651-1048. Suggested improvements may also be submitted using DA Form 1045 (Army Ideas for Excellence Program (AIEP) Proposal).

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*This pamphlet supersedes TRADOC Pamphlet 715-6, 15 December 1993.

CHAPTER I

OVERVIEW

1-1. Applicability. This pamphlet applies to all activities, units, and tenant organizations serviced by HQ TRADOC contracting offices.

1-2. References.

- a. Army Federal Acquisition Regulation Supplement (AFARS).
- b. Armed Services Pricing Manual (ASPM).

1-3. Definitions.

a. Cost analysis. The element-by-element examination of estimated or actual costs and proposed profit.

b. Cost or pricing data. Data consisting of all facts existing up to the time of agreement on price, which prudent buyers and sellers would reasonably expect to have a significant affect on price negotiations. Cost or pricing data shall be obtained only if the contracting officer concludes that none of the exceptions in Federal Acquisition Regulation (FAR) 15.403-1(b) applies. Cost or pricing data cannot predict the accuracy of the prospective contractor's judgment about estimated future costs; however, the data shows the basis for making the judgment.

c. Direct cost. Any cost that is specifically identified with a particular final cost objective.

d. Catalog price/price list. A price included in a catalog regularly maintained by a manufacturer or vendor, published or made available for inspection by customers, that states prices at which sales are currently or were last made to a significant number of buyers constituting the general public.

e. Fair and reasonable price. A price that is fair to both the government and contractor, considering the agreed upon conditions, promised quality, and timeliness of contract performance.

f. General and administrative (G&A). Indirect expenses, including a company's general and executive office, executive compensation, the cost of staff services such as legal, accounting, financial, administrative, and similar expenses.

g. Independent Government Estimate (IGE). The Government's

estimate of resources and cost of resources a prudent contractor will incur in the performance of a contract.

h. Indirect cost. Any cost not directly identified with a single final cost objective but identified with two or more final cost objectives. Also referred to as overhead.

i. Market analysis. The process of analyzing prices and trends in the competitive marketplace for the purpose of comparing product availability and offered prices against market alternatives and establishing the reasonableness of offered prices.

j. Negotiation. A procedure used by the contracting officer that includes receipt of proposals from offerors, permits bargaining, and usually affords offerors an opportunity to revise their offers before award of contract or modification.

k. Price analysis. The process of examining and evaluating a price without looking separately at the estimated cost elements and proposed profit.

l. Reasonable cost. A cost, in its nature or amount, that does not exceed what would be incurred by an ordinarily prudent person in the conduct of competitive business.

m. Sealed bidding. A method of contracting that employs competitive bids, public openings of bids, and ultimate award of a fixed-price contract.

1-4. Price analysis. Conclusion that a price is fair and reasonable must be based on some form of analysis, either price analysis or a combination of price and cost analysis. Price analysis may include one or more of the following:

a. Comparison of competitive price quotations.

b. Comparison of prior quotations and contract prices with current offers for the same or similar end items.

c. Use of yardsticks or parametric relationships to point out apparent gross differences. Examples are dollars per pound or per horsepower, square foot cost of a building, daily cost of a hospital room, cost of washing a single window, or any other unit that can be compared with some familiar unit that has been bought before.

d. Comparison of prices on published price lists issued on a competitive basis with published market prices of commodities, together with discount or rebate schedules.

e. In sealed bidding where effective price competition does not exist, price analysis may be used to determine price reasonableness. This analysis may include a look at what the companies have done on earlier contracts, a comparison with prices paid before for the same or similar product or service, or with an independent government estimate. When other competitive procurement procedures are used, the analysis that leads to the conclusion that effective price competition does or does not exist is price analysis. The depth of this analysis will depend on the products or services being purchased and the dollars involved.

1-5. Cost analysis. Contract cost analysis is the element-by-element examination of estimated or actual costs of contract performance. It involves analyzing cost accounting data furnished by the offeror or contractor. It also involves analyzing design features, materials, manufacturing processes, organization, manning, and estimating assumptions -- all of which contribute to the total cost of a procurement. Cost analysis includes verification of cost data, evaluation of specific elements of cost, and projection of these data. Cost analysis looks into such factors as the following:

- a. Need to incur costs.
- b. Reasonableness of amounts estimated for necessary costs.
- c. Extent of uncertainties of contract performance and realism of any allowance for contingencies.
- d. Basis for allocation of overhead costs.
- e. Appropriateness of allocations of specific overhead costs to the contract.
- f. When data are available, a contractor or offeror's estimated costs may be compared with--
 - (1) Actual cost incurred previously.
 - (2) The last price estimate, or series of prior estimates, for the same or similar item.
 - (3) Current estimates from other offerors.
 - (4) Prior estimates or historical costs of other companies for the same or similar work.

CHAPTER II

INDEPENDENT GOVERNMENT ESTIMATE (IGE)

2-1. General. The IGE is the Government's estimate of the resources and the estimated cost of resources a prudent contractor will incur in the performance of a contract. The costs include--

a. Direct costs (e.g., labor, supplies, equipment, and transportation).

b. Indirect costs (e.g., labor burden, overhead, G&A expense, and profit or fee).

2-2. Requirements. An IGE must be submitted with the statement of work and purchase request and commitment funding document for every procurement action. The format and contents of the IGE will vary in accordance with the complexity and value of the requirement.

2-3. Responsibility.

a. Development of the IGE is the responsibility of the customer activity with assistance, when requested, from their supporting contracting office. However, when requested by the customer activity, the TRADOC Acquisition Center price analyst will assist in the development of the IGE. A written request should be submitted for this service to:

COMMANDER FORT EUSTIS
TRADOC ACQUISITION CENTER
CUSTOMER SUPPORT DIVISION
BUILDING 2798
FORT EUSTIS VA 23604-5538

b. Prior to forwarding a completed IGE to the supporting contracting officer, it must be signed and dated by the preparer and validated by his/her supervisor.

2-4. Discussion.

a. The IGE is one of many tools used by the contracting officer in the evaluation of proposals and determination of whether price or expected cost is fair and reasonable. The quality and price of an acquisition may be solely dependent on the accuracy and reliability of the IGE.

b. Any variations between a contractor's proposal and the IGE require analysis since parts of the IGE for many

acquisitions, especially first time procurements, are based on uncertainties. However, just knowing where uncertainties exist allows the IGE to be a useful tool in the evaluation process and in the determination of a fair and reasonable price for the acquisition.

c. The IGE is a procurement-sensitive document and should be mailed and handled accordingly. Access to the IGE shall be on a need-to-know basis.

CHAPTER III

DEVELOPING THE INDEPENDENT GOVERNMENT ESTIMATE (IGE)

3-1. General.

a. The data contained herein is not intended to cover every possible acquisition, but rather explains or characterizes elements of cost within the general context of their use. There are numerous cost elements included in large, complicated acquisitions costing millions of dollars and few in acquisitions for a single item of relatively low dollar value. Many cost elements are distorted by circumstance and application in different situations. While the following explanations and description of cost elements are sound, the IGE should include only those applicable to and developed from the statement of work or description of services to be acquired.

b. Development of the IGE is the responsibility of the customer activity. It provides an estimated price for funding the acquisition as well as giving the contracting officer an estimate of the proper price level or value of the supplies or services to be purchased. Preparation of the IGE requires the coordinated efforts of installation functional personnel from all areas directly affected by the supplies or services being acquired.

c. The first step in developing the IGE is establishing a mind set as if the developers would be working in a commercial environment. Standards, practices, and procedures that are normally used by industry should be used as the basis for developing the IGE.

3-2. Developing an IGE for services.

a. At first glance, developing an IGE for a service contract seems complicated. However, when each element is reviewed individually, it becomes clear that proper development of the estimate is achievable with a little diligence. An IGE for a service contract should contain the following elements of cost:

(1) Classification of employees required to complete the job.

(2) Number of direct hours required by each class of employee to complete the job.

(3) Wage rates for each class of employee.

- (4) Labor burden.
- (5) Overhead.
- (6) Other direct costs.
- (7) G&A expenses.
- (8) Profit/fee.

3-3. Descriptions. Cost element descriptions follow:

a. Classification of employees required to complete the job: The class of employees to be used in your estimate is directly associated with the service needed. For example, a transportation motor pool operation may consist of sedan drivers, light truck drivers, heavy-duty truck drivers, dispatchers, etc.

b. Number of hours required by classification of employee to complete the job: The labor hours in a labor estimate are based on the number of hours required for each type of employee to complete the service. In the motor pool operation depicted above, the hours needed for sedan drivers is based on the number of times a driver is required and the average length of time for each trip. The historical workload will normally give you these figures. However, keep in mind that changes in the mission can have an effect on this figure. For example, if the motor pool provided transportation to and from the airport during the year from which historical figures are being taken, and this function has now been eliminated, those hours should be removed from your estimate.

c. Wage rates for each class of employee: A significant element of cost in most service contracts is the wage rates associated with the personnel staff. Factors such as shift hours, differential pay, and overtime must be considered when computing this cost. Wage rates can be obtained in a number of different ways. A quick check with the local unions in the area can provide you with the appropriate wages being paid. Another source is the Department of Labor (DOL). The DOL establishes a minimum hourly wage, by geographical area, that must be paid for each class of employee. To ensure you have the most current wage determination for your requirement and geographical area, a listing by occupation is available on-line. Your supporting contracting officer can assist you in obtaining a copy. If the requirement you are contracting for is already under contract, labor categories and wage rates will be in the existing contract. However, keep in mind the wage rate is for the current year. Consideration must be given for inflation and added to this rate.

Finally, another source of wage data is the Government's own rate of pay. The sample worksheet at figure 3-1 can be used in compiling your direct labor requirements.

Item	Job Title/ Classification	Qty	Hourly Rate	Total Hours	Direct Labor
1	Project Manager	1	\$15.00	2087	\$31,305
2	Secretary	1	\$ 7.50	2087	\$15,653
3	Supv Custodian	1	\$ 8.20	2087	\$17,113
4	Custodian	10	\$ 6.40	20870	\$133,568
5	Plumber	2	\$10.80	4174	\$45,079
6	Electrician	3	\$10.80	6261	\$67,619
7	Carpenter	5	\$10.80	10435	\$112,698
8	Storekeeper	2	\$ 6.80	4174	\$ 28,383
9	Warehouseman	4	\$ 6.60	8348	\$ 55,097
Total Direct Labor			\$506,515		

(Estimate for DPW activity)

Figure 3-1. Sample Direct Labor Sheet

d. Labor burden. This is the percentage of costs for direct labor associated with the employee benefits. For general estimating purposes, a figure of 30 percent can be used in a straight-line method of preparation of the IGE discussed later in this pamphlet. The components of labor burden consist of the following:

(1) Payroll taxes. The Federal Insurance Contributions Act (FICA), Federal Unemployment Tax Allowance (FUTA), Medicare, and State Unemployment Tax Allowance (SUTA) rates are applied to wages to compute payroll tax dollars. The estimator should be aware of salary caps on payroll taxes and give consideration when computing this cost.

(a) Currently, the FICA tax rate is 6.2 percent of the first \$72,000.00 wage.

(b) FUTA is currently 0.8 percent of the first \$7,000.00 or \$56.00 per year, per employee.

(c) Medicare: 1.45% of the total wages.

(2) SUTA varies from state to state and contractor to contractor, but should be about \$200-\$300 per year, per employee.

(3) Workmen's compensation insurance. This rate varies from state to state and, for the most part, is dependent upon a contractor's years of business in the state and claims-related experience. Workmen's compensation, unlike payroll taxes, is applied to total wages. Workmen's compensation cost should vary between 2-5 percent of the total payroll.

(4) Employee benefits. This category consists of health and welfare, vacation, and holidays. A further breakout follows:

(a) Health and welfare. Includes life, accident, and health insurance plans; pension plans; civic and personal leave; severance pay; and savings and thrift plans. The application of this figure is dependent upon the wage determination issued by the DOL. Your supporting contracting officer can assist you in obtaining a copy.

(b) Vacation. The normal distribution for allocating vacation pay is 1 week after 1 year of service, 2 weeks after 2 years, and 3 weeks after 5 years, and 5 weeks after 15 years of employment with the company.

(c) Holidays. The Government recognizes 10 paid holidays per year. They are New Year's Day, Martin Luther King, Jr.'s Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day, and Christmas Day. Normally, an employee is given these days off with pay. Thus, a factor of pay for 10 days for each employee, per year, must be considered in your estimate.

e. Overhead. This category includes all items of cost except direct labor, labor burden, and other direct costs which are directly associated with the service required. This is expressed as a percentage of the cost for direct labor and labor burden. For general estimating purposes, a figure of 15 percent can be used for this calculation. The components of overhead consist of several major categories broken out as follows:

(1) Indirect labor. This is a compilation of supervision, inspection, maintenance, custodial, and departmental clerks who are not directly associated with the service being

contracted. An example would be the clerk at the site who files the paperwork generated by the drivers, dispatchers, etc.

(2) Costs associated with the labor, such as equipment rental and property taxes.

(3) Indirect supplies, such as small tools, janitorial supplies, and lubricating oils.

f. Other direct costs. This portion of your estimate is an estimate of the type and quantity of material, equipment, and travel necessary for the contractor to perform the work you expect to accomplish. Normal office supplies are usually included in overhead, but any materials used in the performance of the contract such as vehicles, computers, office furniture, etc., must be included in your estimate. For example, if you require the contractor to furnish a copier and paper, it would be considered a direct cost to the contract.

With a little diligence, you can provide an accurate estimate of these costs. By reviewing the statement of work, you can determine the equipment, materials, and travel required to perform the operation. The next step is to review the equipment and material to be furnished by the Government. Then, it is a matter of simply determining the cost for the materials not furnished by the Government. A detailed estimate of all materials, both Government-furnished and contractor-furnished, and the estimated cost of each, must be forwarded with your estimate. Finally, your estimate should include the cost of any required travel. This includes the number of trips (to and from), number of personnel required to take the trips, the purpose of the trips, expected number of days required, as well as airfares, and rental car needs. The dollars can be roughly estimated based on airfare, rental car rates, and per diem costs per trip. Per diem costs can be obtained from the Joint Travel Regulation at your local transportation office. The sample worksheet at figure 3-2 is an example of how to prepare your listing.

g. G&A expenses. G&A costs are those borne by all elements of a company and not associated with one particular project. This normally includes the cost associated with the corporate home office. It is usually expressed as a percentage of total contract cost (total labor, labor burden, overhead, and other direct costs). An example would be the payroll clerk in the corporate office who not only processes payrolls for this contract but for the entire corporation. Another example is the corporation president. In competitive acquisitions, this expense usually will not exceed 15 percent.

A. Materials

	Item Description	Qty	Unit Cost	Extended Amount
1.	Paint	2016 Gal	\$10.09	\$20,341.44
2.	Paint remover	30 Qts	\$ 1.25	\$ 37.50
3.	Plaster	4 Bx	\$10.00	\$ 40.00
4.	Joint compound	5 Gal	\$ 2.80	\$ 14.00
5.	Joint tape	2 Roll	\$ 5.00	\$ 10.00
6.	Wallboard	4 Shts	\$10.75	\$ 43.00
7.	Paint thinner	203 Gal	\$ 3.00	\$ 609.00

Total Material Cost.....\$21,094.94

B. Supplies

	Item Description	Qty	Unit Cost	Extended Amount
1.	Paint roller	35 Ea	\$ 3.97	\$ 138.95
2.	Brushes	11 Ea	\$ 6.72	\$ 73.92
3.	Trim roller	16 Ea	\$ 1.43	\$ 22.88
4.	Roller handles	7 Ea	\$ 7.70	\$ 53.90
5.	Handrail broom	1 Ea	\$ 7.00	\$ 7.00
6.	Bent scrapers	6 Ea	\$ 4.86	\$ 29.16
7.	Knives	20 Ea	\$ 1.55	\$ 31.00
8.	Razors	11 Pk	\$ 1.19	\$ 13.09
9.	Drop cloths	16 Ea	\$22.87	\$ 365.92

Total Supplies\$ 735.82

C. Equipment

	Item Description	Qty	Unit Cost	Extended Amount
1.	Ladders	2 Ea	\$ 45.00	\$ 90.00
2.	Scaffolding	50 Ft	\$ 22.00	\$ 1,100.00
3.	Extensions	3 Ea	\$125.00	\$ 375.00

Total Equipment.....\$ 1,565.00

Figure 3-2. Sample Other Direct Costs Worksheet

D. Additional Other Direct Costs (e.g., travel, per diem)

	Item Description	Qty	Unit Cost	Extended Amount
1.	Round Trip airfare (to and from St Louis, MO) for environmental protection conference	1 trip	\$683.00	\$ 683.00
2.	Per diem, St Louis	3 nights	\$108.00	\$ 324.00
Total Other Direct Costs.....				<u>\$ 1,007.00</u>
Grand Total Other Direct Costs.....				<u>\$24,402.76</u>

Figure 3-2. Sample Other Direct Costs Worksheet (continued)

h. Profit/fee. Profit represents the monetary excess realized by a contractor after the deduction of cost incurred. Fee represents a predetermined amount beyond the initial estimate of cost. Fee may be fixed at the outset of performance, as in a cost-plus-fixed-fee arrangement, or may vary during performance as in a cost-plus-award-fee situation. The size of the acquisition, in terms of both risk and degree of difficulty, should help in determining profit/fee. For general estimating purposes, you may assign any value within a range of 5-15 percent based on a contractor's risk in fulfilling the contractual requirements to provide the services being acquired. The contracting office can assist in determining the figure to use in this area.

CHAPTER IVA STRAIGHT-LINE APPROACH TO DEVELOPING THE IGE

4-1. General. The previous chapters provided a broad outline of cost elements commonly found within the framework of service contracts. The basic data needed to develop the IGE are an estimate of the number of personnel in each job title/classification, the number of labor hours for each, an estimate of the material and travel costs, and overhead and profit for the particular acquisition.

4-2. Components. To eliminate the large number of cost element details in a typical acquisition, the estimator may utilize the "straight-line" approach in developing the government estimate. While these figures are not exact, they do provide a fairly accurate estimate that can be used for comparison purposes.

a. Direct labor. In general, pricing direct labor at total available manhours per year (2087) includes costs for vacation, holidays, and sick leave.

b. Labor burden. Labor burden includes FICA, FUTA, SUTA, workmen's compensation, and health and welfare. Labor burden factors are fairly consistent within the acquisition policies and regulations for service contracting; therefore, they may be consolidated to form one line item expressed as a percentage of total cost. For general estimating purposes, this can be expressed as 30 percent of the direct labor costs.

c. Other direct costs. This is a total compilation of the costs you have computed for the type and quantity of material, equipment, and travel necessary for the contractor to perform the work you expect to accomplish.

d. Overhead. Overhead is normally expressed as a percentage of direct labor, labor burden, and other direct costs. For estimating purposes, a figure of 15 percent is appropriate.

e. Profit. Again, this is a percentage estimate considering the complexity and subsequent risk the contractor will incur. This can range from 5-15 percent; however, profit is not normally authorized for G&A costs.

f. G&A. This is also normally expressed as a percentage. However, G&A is not normally computed against profit. A figure of 15 percent is an appropriate figure to use in a Government estimate. While this figure is valid for general estimating purposes, actual G&A that a contractor incurs can be significantly more. The contracting officer will closely

scrutinize the G&A proposed by the contractor before it is accepted. Figure 4-1 is an example of a completed IGE for a DPW functional requirement. Back up paperwork depicting labor hours by category, types of materials, etc., would be provided as attachments.

NOTE: The percentages listed in this pamphlet are for general estimating purposes and will not always agree with actual figures submitted by the contractor. Your contracting officer will determine the validity of contractor figures, when appropriate, before an award is made.

Independent Government Estimate
DPW Services

Total direct labor	506,515
Labor burden @30%	151,954
Total direct labor and burden	<u>\$ 658,469</u>
Other direct costs	63,000
Subtotal	<u>\$ 721,469</u>
Overhead @ 15%	108,220
Subtotal	<u>\$ 829,689</u>
Profit @ 10%	82,969
Subtotal	<u>\$ 912,658</u>
G&A @ 15% (of total direct labor and burden, other direct costs and overhead only)	124,453
Total estimated contract price	<u>\$ 1,037,111</u>

Prepared by: John Doe/DCSBOS, ATBO-K

Signature: _____

Date prepared: 15 Dec 99

Validated by: Jane Smith/DCSBOS, ATBO-K

Signature: _____

Figure 4-1. Sample Government Estimate Worksheet

CHAPTER V

COMMERCIAL SUPPLY IGE

5-1. General. Developing an IGE for commercial supplies is much less complicated than for a service contract. It is a matter of determining the market value of an item and using that figure as the IGE. This can be done in several ways:

a. General Services Administration (GSA) schedules. This figure is a price in which the GSA has contracted with certain companies to provide an item at a predetermined price. Some GSA schedules are at the contracting office. However, due to the large number of GSA contracts in existence, many schedules are not available. A comprehensive catalog of GSA schedules can be found at <http://www.fss.gsa.gov/customers.cfm>.

b. Published price lists. This is a listing from an individual company that is published for use by the general public.

c. Catalog pricing. This is a pricing arrangement such as a J.C. Penney's catalog.

d. Market survey. A market survey is comparison of the prices offered within the local area for an item. This action is normally done better with the contracting officer.

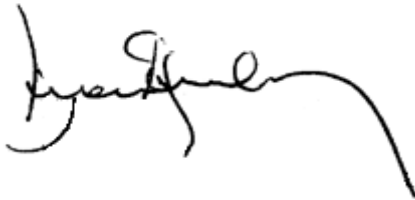
e. Previous buys. This is simply a comparison of previous purchases of the same item if there is comparability in quantities, conditions, terms, and performance times. Adjustments should be considered for inflation, etc., when appropriate.

5-2. Disclosing information. You should not obtain pricing from a vendor since, in doing so, you may disclose advance procurement information. In any contacts with vendors, you must be careful not to commit the Government in any way to purchase an item. Only a duly appointed contracting officer has the authority to commit the Government. Any other person can be held personally liable and disciplinary action can be taken. Before you attempt to contact a vendor for any information concerning a potential purchase, it is a good idea to contact a supporting contracting officer. They are trained in information-gathering techniques and can provide valuable insight to ensure no unauthorized information is released and potential obligations are avoided.

FOR THE COMMANDER:

OFFICIAL:

CHARLES W. THOMAS
Major General, GS
Chief of Staff

A handwritten signature in black ink, appearing to read 'Thom E. Tuckey', with a long, sweeping horizontal stroke extending to the right.

THOM E. TUCKEY
Colonel, GS
Deputy Chief of Staff
for Information Management